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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/800,123	03/12/2004	Gary Thwing	2003P18628US	9095

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Elsa Keller
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EXAMINER

NEWAY, SAMUEL G

ART UNIT	PAPER NUMBER
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2626

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/800,123	Applicant(s) THWING, GARY	
	Examiner Samuel G. Neway	Art Unit 2626	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 21 December 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-30 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-30 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. This is responsive to the Amendment filed on 21 December 2007.
2. Claims 1 – 30 are pending and are considered below.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claims 1 – 30 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Independent claims 1, 11, and 21 recite the limitation of selecting successive characters one at a time from the recognized character sequence in order beginning with the first recognized character; for each selected character, constructing a current potential match set of potential character string matches by appending one or more characters selected from a set of misrecognized characters including the selected character to each potential character string match in a prior potential match set constructed for a preceding selected character, if any, and deleting from the current potential match set potential character string matches missing from a list of reference character strings.

According to this limitation, after selecting the first character, there is no constructing a current potential match set by appending or deleting as claimed because there is no prior potential match set to which characters may be appended. When the

second character is selected (and for every other character selected thereafter), there is still no constructing a current potential match set by appending or deleting being performed because a prior potential match set still does not exist since there was no action taken (such as creating a potential match set) after the first character's selection, i.e. the potential match set is always empty. Therefore the claimed 'for loop' is basically an empty loop where no current potential match set is constructed. The limitations related to constructing by appending and deleting will not be considered below.

Claim Rejections - 35 USC § 101

5. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

6. Claims 21 – 30 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

In claims 21 – 30, a “system” is recited; however, the only element recited as part of the system, “a voice browser”, is defined in the specification as being able to be implemented in software (program code) alone (“the voice browser 16, and the document server 18 are not limited to any particular hardware or software configuration, but rather they may be implemented in any computing or processing environment, including ... software”, [0018]).

Program code is functional descriptive material and therefore non-statutory, absent being claimed in combination with the necessary hardware to enable the software to act as a computer component and realize its functionality.

Claim Rejections - 35 USC § 102

7. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

8. Claims 1 – 30 are rejected under 35 U.S.C. 102(b) as being anticipated by Marx et al (“Reliable Spelling Despite Poor Spoken Letter Recognition”, Proc. of the American Voice I/O Society, San Jose, CA, September 20-22, 1994).

Claim 1:

Marx discloses a machine-implemented caller interface method, comprising:
receiving a sequence of recognized characters beginning with a first recognized character and ending with a last recognized character (“Spelling a name one letter at a time”, page 2, paragraph 4);

selecting successive characters one at a time from the recognized character sequence in order beginning with the first recognized character (page 4, paragraph 5);

for each selected character, constructing a current potential match set of potential character string matches (“We reduce the list”, page 4, paragraph 5); and

transmitting for presentation to a caller a reference data item corresponding to the potential character string match in a current potential match set containing one a single potential character string match (“The system returns the name “David”, page 4, paragraph 5).

Claim 2:

Marx discloses the method of claim 1, wherein the sequence of recognized characters is received from a speech recognition system (page 1, section "Motivation").

Claim 3:

Marx discloses the method of claim 2, further comprising transmitting to the speech recognition system a grammar identifying characters to be recognized.

Claim 4:

Marx discloses the method of claim 1, wherein each misrecognized character set contains at least one character likely to be misrecognized for the corresponding selected character by a speech recognition system (page 3, table and related text).

Claim 5:

Marx discloses the method of claim 1, wherein deleting comprises comparing potential character string matches and reference character strings of equal character length ("reduce the list", page 4, paragraph 5).

Claim 6:

Marx discloses the method of claim 1, wherein the misrecognized character sets and the reference character strings are stored in a single document file (page 3, table and related text).

Claim 7:

Marx discloses the method of claim 6, wherein each list includes a respective table containing reference character strings of equal character length, and different tables contain reference character strings of different respective character length (page 3, table and related text).

Claim 8:

Marx discloses the method of claim 1, further comprising transmitting for presentation to the caller reference data items corresponding to the potential character string matches in the current potential match set constructed after all recognized characters in the sequence have been selected (“The system returns ...”, page 4, paragraph 5).

Claim 9:

Marx discloses the method of claim 1, further comprising transmitting to the caller a message prompting the caller to spell at least a portion of an identifier of a requested reference data item (page 2, paragraphs 4 and 5).

Claim 10:

Marx discloses the method of claim 9, wherein after all recognized characters in the sequence have been selected and multiple potential character string matches remain in the current potential match set, further comprising transmitting to the caller a message prompting the caller to spell an additional portion of the identifier of the requested data item (page 4, paragraph 1).

Claims 11 – 20:

Claims 11 – 20 are similar in scope and content to claims 1 – 10 and are rejected with the same rationale.

Claims 21 – 30:

Claims 21 – 30 are similar in scope and content to claims 1 – 10 and are rejected with the same rationale.

Conclusion

9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

a. Brown et al (USPN 6,208,965) discloses a method for performing name acquisition based on speech recognition using confusion matrix and confusion sets.

b. Brown et al (USPN 6,400,805) discloses The a method for recognizing an identifier that is entered into a system by a user, and in particular, to a method and apparatus that finds a match for such an input identifier from among a plurality of reference identifiers on the basis of a plurality of confusion sets.

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Samuel G. Neway whose telephone number is 571-270-1058. The examiner can normally be reached on Monday - Friday 8:30AM - 5:30PM EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David R Hudspeth can be reached on 571-272-7843. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/S. G. N./
Examiner, Art Unit 2626

/David R Hudspeth/
Supervisory Patent Examiner, Art Unit 2626